NOVEMBER 2000

FRONTLINES

LINKING ALCOHOL SERVICES RESEARCH AND PRACTICE

Editor's Note

Brief physician advice to reduce or reverse unhealthy behavior has been successfully used to help patients with a range of health-related problems. Although research has demonstrated that brief intervention strategies can reduce excessive alcohol use among various patient populations and across health care settings, they have not been widely implemented. This issue of *FrontLines* focuses on the use of brief intervention in the alcohol treatment field.

In the Invited Commentary, Michael Fleming of the University of Wisconsin at Madison provides an overview of brief interventions to reduce alcohol use, including a description of their goals, components, clinical uses, barriers to implementation, and challenges for research.

A Research Review by Harold Perl of NIAAA summarizes results from numerous studies demonstrating the effectiveness of brief interventions across various treatment settings and patient groups.

Gail D'Onofrio and Linda Degutis of Yale University offer a Physician Perspective on what can be done to encourage the use of brief intervention. And, in a Health System Perspective, Suzanne Gelber of SGR Health, Ltd., discusses implementation barriers at the system level and what a San Diego-based initiative has learned from its efforts to incorporate brief intervention into routine health care practice.

We hope that you find this issue of *FrontLines* interesting and informative.

COMMENTARY

Brief Intervention To Reduce Alcohol Use: A Counseling Strategy With Broad Implications Across Health Care Settings and Patient Groups

By Michael Fleming, M.D., M.P.H., University of Wisconsin, Madison

Brief intervention, also known as "brief talk therapy," is a time-limited, patient-centered counseling strategy focused on changing behavior and increasing medication compliance. This strategy is widely used by physicians and other health care professionals for changing a range of patient behaviors, including dietary habits, weight reduction, smoking, and cholesterol and blood pressure control. It is also attracting increasing attention for its application to alcohol use and to the estimated 40 million Americans who drink alcohol at levels above recommended limits. (A recent report in the NIAAA journal *Alcohol Research & Health* provides a more comprehensive review of the subject.[1])

Typically, brief intervention is restricted to four or fewer sessions, each session lasting from a few minutes to an hour. It is most frequently used with patients who are not alcohol-dependent to reduce alcohol consumption.

Studies have shown that brief intervention delivered by primary care providers, therapists, and other health care professionals can decrease alcohol use among non-dependent drinkers in a variety of settings, including primary care clinics, managed care settings, and hospitals. In addition, brief interventions have demonstrated positive results for a broad group of problem drinkers and for populations — pregnant women, college students, and the elderly — that sometimes are overlooked in the alcohol treatment system. Finally, research has shown that brief interventions can reduce not only alcohol use but also alcohol-

continued on page 2

IN THIS ISSUE

A PUBLICATION OF THE NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM
IN CONJUNCTION WITH THE ACADEMY FOR HEALTH SERVICES RESEARCH AND HEALTH POLICY

related harm and health care and societal costs. (For a more detailed review of research findings on brief interventions, see article on page 4.)

The clinical elements of brief intervention for the prevention and treatment of alcohol problems vary across trials and clinical programs. Following are six common elements of brief interventions in health care settings, with examples of component questions and statements for clinicians.

1. Conduct an assessment.

■ "Tell me about your drinking."

■ "What do you think about your drinking?"

■ "What does your family or partner think about your drinking?"

■ "Have you had any problems related to your alcohol use?"

■ "Have you ever been concerned about how much you drink?"

2. Provide clear and direct feedback.

■ "As your doctor (or therapist), I am concerned about how much you drink and how it is affecting your health."

■ "The car crash is a direct result of your alcohol use."

3. Establish a treatment contract through negotiation and goal setting.

■ "You need to reduce your drinking. What do you think about cutting down to three drinks two to three times per week?"

■ "I would like you to use these diary cards to keep track of your drinking over the next two weeks. We will review these at your next visit."

4. Apply behavioral modification techniques.

■ "Here is a list of situations when people drink and sometimes lose control of their drinking. Let's talk about ways you can avoid these situations."

■ "Here are some alternative things you can do instead of drinking when you do feel the urge to drink."

5. Ask patients to review a self-help booklet and complete diary cards.

■ "I would like you to review this booklet and bring it with you at your next visit. It would be very helpful if you could complete some of the exercises in the book. I'd also like you to write down how much you drink on these diary cards."

6. Set up a continuing care plan for nurse reinforcement phone calls and clinic visits.

■ "I would like you to schedule a follow-up appointment in one month so we can review your diary cards and I can answer any questions you might have. I will also ask one of the nurses to call you in two weeks. When is a good time to call?"

Clinical Uses of Brief Intervention

Brief intervention is useful in three clinical situations. First, brief intervention can reduce alcohol use and the risk of alcohol-related problems in non-dependent drinkers who are consuming alcohol above recommended limits. The goal of brief intervention with this population is harm reduction, not abstinence. The clinician tries to help the patient reduce alcohol use to one to two drinks per day, three to four drinks per occasion, or no more than seven drinks per week for women and 14 drinks per week for men.

Second, brief intervention may be used to facilitate medication compliance and abstinence with patients who are being treated with pharmacological therapies. For example, patients taking disulfiram or naltrexone for alcohol dependence or persons using antidepressant medications are more likely to respond and remain on medication with client-centered brief counseling. Non-compliance is a major issue with patients receiving medication for alcohol dependence and co-morbid conditions.

Finally, brief intervention may be used to facilitate the referral of persons who do not respond to brief counseling alone or with patients who are alcohol-dependent. Most patients who are referred for an assessment or counseling by a primary care provider either do not schedule an appointment or fail to keep the scheduled assessment. Brief intervention can greatly facilitate this process and increase successful completion of an assessment and admission to a treatment program. The goal of brief advice in this situation is to move patients along the readiness-to-change-scale from pre-contemplation to action. Dealing with ambivalence, resistance, and patient fears is critical to making a successful referral.

Barriers to Use, Challenges for Research

Despite evidence that brief intervention counseling can help at-risk or problem drinkers change their drinking behavior, this strategy has not been widely implemented. Several factors contribute to this problem: lack of clinician awareness, education, and training; failure of various providers to incorporate brief intervention counseling into general health care activities; and lack of reimbursement by health plans.

These barriers can be overcome. Clinicians need training and education early in their careers, or, better yet, while they are still in medical school and residency. Medical schools and universities should recruit additional faculty to teach students and serve as role models. Physicians should be tested in brief intervention skills as a requirement for graduation from medical school and residency. Continuing medical education programs should include role-playing and skills-based workshops to reinforce brief intervention techniques and keep physicians up to date. Standards of care should be developed to include the routine use of brief intervention in all clinical settings, particularly emergency departments, hospitals, and primary care settings — and their use must be actively promoted. Finally, health care plans should specifically include payment for this activity.

The research community can help by addressing a series of important

continued on page 7

Brief Interventions for Alcohol Problems: Whose Behavior Can We Change?

By Gail D'Onofrio, M.D., and Linda C. Degutis, Dr.P.H., Yale University

Research has shown that brief interventions for alcohol problems are effective in a variety of settings, including primary care, emergency departments, and inpatient trauma services. Careful review of the literature presents compelling evidence that physicians can change patients' drinking patterns with a brief intervention as simple as five minutes of advice.

Yet, despite this knowledge and despite multiple studies showing that alcohol treatment works and is cost-effective, we do not routinely screen patients for alcohol problems; nor do we offer intervention and referral.

Why not? How can we change our behavior?

Changing behavior is not easy. We all have experience with trying to change patient behavior, but changing physician behavior is also challenging. A young but growing body of research in this area has identified several barriers to changing physician behavior. These include lack of education, insufficient time and resources to implement change, reimbursement problems, and practitioner attitudes and beliefs.

Insufficient Education. Education may be helpful for changing very specific behaviors. For example, physicians could benefit from learning which of the many tools available for screening patients with alcohol problems are the easiest to use for their specific specialty and setting. It would help, too, if medical schools and residency programs acknowledged the importance of screening and brief intervention so that future physicians are trained in this skill. The inclusion of skill-based practice sessions would improve physician competence and confidence in performing this intervention.

Lack of Time and Resources. Physicians in all specialties face conflicting demands and ever-increasing responsibilities, but initial screening questions only require about 30 seconds to complete. Successful strategies include asking patients to fill out the questionnaire themselves in the waiting room, using community outreach workers to administer the questionnaire, and incorporating screening into an automated health needs assessment form. Once a problem has been identified, the physician needs to feel that he or she can appropriately refer a patient, especially if that patient has complex needs. It is important to identify available resources and develop community partnerships for referral.

Despite multiple studies showing that alcohol treatment works and is cost-effective, we do not routinely screen patients for alcohol problems; nor do we offer intervention and referral.

Reimbursement Problems. Some primary care specialties can charge a counseling fee for brief intervention, but others, such as emergency physicians, cannot, even though many patients with alcohol problems utilize emergency departments as their sole source of care. State and national policy should require payment for screening, intervention, and treatment of alcohol-related problems at the same level as other diseases, and in all clinical settings.

Practitioner Attitudes and Beliefs. This is a major hurdle to overcome. Knowing something is not the same as doing it. Many patients with alcohol problems know that they should change their behavior, but, for a variety of reasons, may be unable to do it. Likewise, just because we know that screening and brief intervention works doesn't mean that we will change our behavior and incorporate it in our practice. Yet we readily screen and intervene for other, much rarer events. For example, we always ask the patient who presents with a laceration about tetanus immunization status, even though most of us have never seen a case of tetanus. We also believe that it is our responsibility to assess patients with asthma, diabetes, hypertension, and other chronic illnesses on what they know about their disease; review their medications; and provide advice for behavioral change and prescription medications.

Strategies for Change

We need to overcome these barriers and incorporate important new knowledge into our practices. We suggest two ways for doing that: ■ make use of proven techniques for changing physician practice and ■ apply the same principles to changing physician behavior that we have been using to change patient behavior.

Research has identified several methods for changing physician behavior, including education, feedback, participation by physicians in the change process, and administrative interventions, incentives and penalties. These methods vary greatly and may include laws, regulations, and institutional policies aimed at physicians. For example, the state of Connecticut recently enacted a law (Public Act 98-201) that mandates alcohol and drug screening of all injured patients presenting to an emergency department who require a trauma team response or are admitted to the hospital.

Effectiveness studies indicate that combinations of these methods targeted at multiple behavioral factors are more likely to succeed than any

continued on page 8

Numerous Studies Demonstrate Effectiveness of Brief Interventions

By Harold I. Perl, Ph.D., NIAAA

A large number of people who do not meet the diagnostic criteria for alcohol dependence still consume more alcohol than is safe for them — putting them at great risk for health problems, family and work difficulties, motor vehicle crashes, and injuries. In fact, more than 70 percent of drinkers aged 21 or older exceed the guidelines for low-risk drinking. This has serious implications for public health and for treating alcohol use problems.

In recent years, time-limited strategies such as brief interventions have been increasingly employed in attempts to reduce the levels of alcohol use among these so-called "risky" drinkers. Medical and other professional personnel have implemented these brief interventions in a variety of settings, including hospital emergency rooms (ER), primary care medical practices and college campuses. Research has demonstrated the effectiveness of brief interventions across those and other settings and in populations — adolescents, older adults, and pregnant women — that typically have not received much attention from the traditional system of specialized alcohol dependence treatment.

Emergency Care Settings

■ A randomized, prospective, controlled trial in a Level 1 trauma center assigned 762 patients who had been admitted for injuries to either a control group or a group that received a single motivational interview (MI) with a psychologist. At 12 months, the intervention group decreased alcohol consumption significantly, with the reduction most apparent in patients with mild to moderate alcohol problems. In addition, there was a 47 percent reduction in injuries requiring either emergency department or trauma center admission at 1-year follow-up and a 48 percent reduction in injuries requiring hospital admission at 3-year follow-up.

■ Another study evaluated the use of a 30-minute MI to reduce alcohol-related consequences and use among adolescents treated in an ER following an alcohol-related event. Ninety-four patients aged 18 to 19 years were randomly assigned to receive either the MI or standard care. Assessment and intervention were conducted in the ER during or after the patient's treatment. Follow-up assessments at 6 months showed that patients who received the MI had a significantly lower incidence of drinking and driving, traffic violations, alcohol-related injuries, and alcohol-related problems than patients who received standard care. Both groups showed reduced alcohol consumption, but the harm-reduction focus of the MI intervention produced additional benefits by further reducing negative outcomes related to drinking.

■ A study conducted at an emergency surgical ward in Sweden randomized 165 patients into two intervention groups, one that received a brief alcohol assessment with feedback on risky alcohol consumption and another that received extensive alcohol counseling. At follow-up 6 to 12 months later, patients in both intervention groups significantly reduced the amount they drank per occasion. Although no differences were found between the interventions, these results suggest the effectiveness of a brief assessment administered in the emergency setting with feedback on risky consumption.

Primary Care Practice Settings

■ An early study, conducted in the United Kingdom, randomized 909 patients to either a control group or an intervention group that received two visits of 5 to 10 minutes with a general practitioner and two 5-minute follow-up telephone calls by a nurse. After one year, the patients in the intervention group had significantly reduced their drinking levels. In addition, men in the intervention group had reduced blood pressure and healthier liver enzyme levels.

More than 70 percent of drinkers aged 21 or older exceed the guidelines for low-risk drinking.

■ Project TrEAT (Trial for Early Alcohol Treatment) randomly assigned 482 men and 292 women into either a control or an experimental group that received two counseling visits of 10 to 15 minutes by a primary care physician and two 5-minute follow-up phone calls from a nurse using a scripted workbook that included advice, education, and behavioral contracting guidelines. Follow-up at 12 months showed significant reductions in alcohol use during the preceding week, episodes of binge drinking, and frequency of excessive drinking. Sustained reductions in alcohol use have been observed at 48-month follow-up.

■ Another U.S. study, Project Health, found that primary care physicians and nurse practitioners who received brief training in skills, attitudes, and knowledge regarding high-risk drinking were able to significantly increase their counseling skills, their preparedness to intervene with at-risk drinkers, and the perceived usefulness of intervention. This study randomly assigned primary care medical sites to be either special intervention or usual care sites. A total of 530 high-risk drinkers participated. The caregivers at the intervention sites had been trained

to conduct a 5- to 10-minute patient-centered counseling session and had access to an office support system that screened patients, cued providers to intervene, and made patient education materials available. At 6-month follow-up, alcohol consumption was significantly reduced for patients who had received brief interventions during the course of their routine primary medical care at the special intervention sites.

■ Cognitive-behavior counseling was significantly more effective than simple advice at reducing alcohol consumption, according to a study that examined screening and brief counseling activities by physicians and nurses. In this study, nurses provided three hours of cognitive-behavioral counseling over the course of a year. Compared with simple advice, the intervention produced markedly higher reductions in reported alcohol consumption, psychosocial problems, liver enzyme levels that reflect alcohol use, and frequency of subsequent physician visits.

■ Another randomized controlled study, conducted within a busy HMO primary care medical setting, provided very brief clinician advice (30 seconds), a 15-minute motivational session by a counselor, and printed materials to hazardous drinkers. In follow-ups conducted at 6 and 12 months, intervention patients reported drinking fewer standard drinks and fewer days of drinking than patients in the control group.

■ A study conducted in a family practice in Australia compared the effects of brief physician advice (5 minutes) with two 30-minute cognitive-behavioral sessions provided by either a physician or a nurse. At 12-month follow-up, the quantity and frequency of drinking had been reduced for all three groups and the brief physician advice was no less effective than the 30-minute interventions by physicians and nurses.

■ A study of men with hazardous alcohol consumption, located in community-based primary care practices in Spain, compared a 15-minute brief intervention with a 5-minute simple advice session. At 12-month follow-up, the brief intervention was more effective in decreasing the frequency of excessive drinkers and in reducing weekly alcohol intake.

Interventions with Other Populations

■ ***Older Adults:*** Project GOAL (Guiding Older Adult Lifestyles) tested the effects of brief advice from primary care physicians in reducing alcohol use by older adult problem drinkers. Intervention group patients received two 10- to 15-minute physician-delivered counseling sessions that included advice, education, and behavioral contracting using a scripted workbook. Patients receiving the brief intervention demonstrated significant reductions in alcohol use from the previous week, episodes of binge drinking, and frequency of excessive drinking, compared with patients in the control group, at 3, 6, and 12 months.

Brief interventions for problem drinkers can generate a positive net benefit for patients, the health care system, and society.

■ ***Pregnant Women:*** In a project designed to reduce prenatal alcohol consumption among pregnant women, patients received a 2-hour assessment only or a 2-hour assessment plus a brief intervention by a physician. More than half of the subjects screened had stopped drinking alcohol by the time of random assignment, presumably because of their pregnancy. Among the women who were abstinent prior to the comprehensive assessment, those who received the brief intervention maintained higher rates of abstinence throughout the pregnancy. However, women in both groups significantly reduced their alcohol use, with minimal differences between the groups. That may be because the two-hour assessment served as a brief intervention itself, so that additional contributions from the supplementary intervention were negligible.

■ ***College Students:*** Two studies demonstrated the effectiveness of brief interventions for reducing alcohol use and alcohol-related problems among college students. Heavy-drinking students who received a one-hour counseling session with personalized feedback and a discussion of drinking risks and norms showed a decrease in alcohol-related problems and in alcohol use and binge drinking over two years. In another study, high-risk drinking freshmen who received individual motivational interviews and personalized feedback reports on drinking patterns and risks had greater reductions in alcohol use and alcohol-related problems than did high-risk drinkers in a comparison group. Over time, however, high-risk drinkers from both groups reduced their levels of alcohol use and related problems.

Cost Analyses of Brief Interventions

■ One recent study examined follow-up data from Project TrEAT, a randomized controlled trial described above, to estimate the economic benefits of that brief intervention. The patient and health care costs associated with the intervention were compared with the changes in health care utilization, legal events, and motor vehicle crashes over the 6- and 12-month follow-up period. The average per-subject benefit of the intervention was $1,151, while the cost per subject was $205, yielding a benefit-cost ratio of 5.6:1. In other words, this analysis suggests that an investment of $10,000 in treatment resulted in a total benefit of $56,263. It also offers evidence that brief interventions for problem drinkers can generate a positive net benefit for patients, the health care system, and society.

continued on page 8

Getting Beyond the Barriers: Screening and Brief Intervention for Alcohol and Drug Abuse in Organized Systems of Health Care

By Suzanne Gelber, SGR Health, Ltd.

Screening and brief intervention (SBI) is intended to reduce the personal and public health consequences of risky behavior, including drug abuse and overuse of alcohol. Within the alcohol treatment field, an evidence-based consensus appears to be emerging for the promotion of SBI within general health care settings.

Recent research indicates that SBI is cost-effective and can confer many benefits. For example, Michael Fleming conducted a multicenter, randomized controlled clinical trial on the cost-benefits of brief physician advice for problem drinkers who reported drinking above a threshold limit. His research showed a benefit-cost ratio of 5.6:1. Measures of excessive costs avoided included motor vehicle crashes, criminal activities, and legal events that were averted, as well as savings in emergency department and hospital use.

These and other findings beg the following question: What exactly is stopping organized systems of care from incorporating SBI into everyday practice?

What exactly is stopping organized systems of care from incorporating SBI into everyday practice?

Many observers have argued that doctors and other overburdened health care personnel are not willing to participate in preventive services because of time constraints, lack of skills related to detection of alcohol and drug abuse problems, and organizational obstacles. However, recent literature indicates that clinicians — even those in busy emergency room and primary care settings — are generally willing to participate in SBI if it is integrated into routine clinical practice.

Since 1995, a collaborative SBI model using health educators as assessors subsequently linked to physicians has been instituted in a portion of the city and county of San Diego. In this initiative, supported by The Robert Wood Johnson Foundation (RWJ), SBI is being implemented in public- and private-sector hospital emergency rooms and primary care clinic settings. Preliminary results of an ongoing policy evaluation being conducted by SGR Health, Ltd., indicate that four aspects of this initiative appear to be particularly important:

- The entity responsible for designing and maintaining the program formed a sustained, community-wide collaborative of health care institutions and clinicians that supports and monitors the initiative.
- Although the peer health educators who provided the assessments worked on-site in the health care setting, they were paid with external resources.
- Assessments were performed by trained peer health educators who, with patient permission, provided the results to the physicians. Physicians thus received scientifically valid but brief patient self-reports of substance overuse. These assessments served as the basis for an expression of medical concern about risky behavior and the advisability of reducing the level of alcohol use or receiving treatment.
- Initial patient interviews were conducted while patients were waiting to see their physicians for another purpose. The physicians were then able to review the information from those interviews prior to seeing their patients — allowing them to easily incorporate SBI into routine clinical practice and interactions with their patients.

Initial findings from this evaluation suggested that the organizational and practical obstacles often raised with respect to SBI were not a problem for these clinicians. However, it will be important to see whether the San Diego initiative will continue to support SBI when foundation funding is no longer available and the organizations have to pay the health educators themselves. A number of the collaborating institutions say that they are willing to assume these modest costs.

Participants from private-sector health organizations appeared to be more enthusiastic about the SBI program and more willing to assume the cost of the health educators than did their counterparts at the community primary care clinics. Although the public-sector clinics understood that SBI is effective and might even save them money in the long run, they had few resources to devote to anything other than managing the constant flow of needy patients and helping them meet their most immediate needs for basic services such as housing and food assistance. Private-sector organizations were better positioned to make more flexible use of their resources — both financial and managerial — and thus able to take a broader and more long-term view that included the use of SBI.

SBI, accompanied by careful scientific and policy research to document its successes and challenges, has a key role to play in emergency and selected primary care settings. As SBI matures and the accompanying body of protocols and research is widely reported, organized systems of care will take note of the clinical and financial implications. SBI is one preventive intervention that is likely to be widely adopted by organized care systems eager to find patient-friendly ways to reduce unnecessary hospital, pharmaceutical, and outpatient care.

Common Elements of Brief Interventions

Investigators reviewing the effectiveness of brief interventions have proposed the acronym FRAMES to summarize six key elements that are common across such interventions.[1] Many of these elements can be seen as explicit or implicit components of the interventions examined by the research described in this issue.

***Feedback** of Personal Risk:* Patients are provided specific feedback of their own risks for problems based on current drinking patterns, lab results, likely medical consequences, or, in some instances, comparisons to population drinking norms.

*Personal **Responsibility** for Change:* Perceived personal control has been recognized to motivate behavior change. Consequently, brief interventions typically emphasize the patient's choice in reducing drinking.

*Clear **Advice** to Change:* Patients are given explicit advice to reduce or stop drinking, even while their personal responsibility is acknowledged.

***Menu** of Ways to Reduce or Stop Drinking:* Brief intervention practitioners offer patients a variety of strategies from which to choose, including setting specific limits on consumption, learning to recognize high-risk drinking situations and developing skills to avoid drinking during them, and proposing alternatives to drinking. Written self-help materials that present such strategies or include drinking diaries can also be helpful.

*Therapeutic **Empathy** as a Counseling Style:* A warm, reflective, empathetic, and understanding style of delivering a brief intervention has been observed to be more effective in obtaining behavior change than styles described as directive or coercive.

*Encouragement of Patient **Self-Efficacy** and Optimism:* Brief intervention practitioners emphasize and encourage patients' self-efficacy, strengths, and ability to change, rather than focusing on perceptions of helplessness or powerlessness. Optimism regarding successful behavior change is facilitated and reinforced.

Additional elements of effective brief interventions include goal-setting, ongoing follow-up, and intervention timing.

Establishing a Drinking Goal: Explicit goals are often very helpful to attaining and maintaining behavior changes. These are typically negotiated between the patient and the practitioner and may take the form of a contract or written agreement.

Ongoing Follow-Up: Telephone calls from office staff, repeat office visits, mailed reminders, or follow-up medical exams may be effective in maintaining changes in alcohol drinking behaviors.

Timing: Persons may be most likely to change when they perceive that they have a problem requiring change. Such opportunities may occur when patients are admitted to emergency medical settings with alcohol-related injuries or when routine medical care identifies the presence or the risk of alcohol-related illness.

[1] Bien, TH, Miller, WR, and Tonigan, JS. "Brief interventions for alcohol problems: a review." *Addiction*. 1993, 88(3): 315-336.

Web Site Provides Alcohol and Drug Abuse Data

The Substance Abuse and Mental Health Services Administration (SAMHSA) announces a new web site that provides easy access to the latest national and state data on alcohol and drug abuse and treatment. The site, www.Drug AbuseStatistics.samsha.gov, features data highlights that provide a concise summary of findings presented in SAMHSA data reports. The most current data from major surveys such as the National Household Survey on Drug Abuse, the Drug Abuse Warning Network (DAWN), and the Treatment Episode Data Set (TEDS), are also available there.

Fleming
continued from page 2

questions regarding the effective use of brief intervention. These questions include: ■ What are the long-term effects of brief intervention beyond 12 months? ■ Do they diminish with time? ■ Does brief intervention reduce morbidity (hypertension, depression, diabetes, injuries,) and mortality? ■ What are the most effective intervention components (review of drinking norms, behavioral contracting, self-help booklets, motivational interview techniques)? ■ What are the outcomes of brief intervention combined with pharmacotherapy? ■ Does brief intervention treatment work with persons who are alcohol-dependent? ■ Are certain groups of patients more likely to respond to brief intervention treatment? ■ How can we implement primary care-based screening, brief intervention, and referral? ■ What is the best "stepped care approach" for treatment of patients who are adversely affected by alcohol use? ■ How can we develop a continuum of care from primary care to specialized treatment for patients who do not respond to brief intervention?

We have a tremendous opportunity to reduce the burden of illness and suffering associated with alcohol use among the millions of Americans who drink alcohol above recommended limits. Brief intervention has been shown to significantly reduce alcohol use and alcohol-related harm, as well as health care costs. Systematic implementation of this strategy can have a significant impact on the public health of this country.

[1] Fleming MF, Manwell LB. "Brief intervention in primary care settings." *Alcohol Research & Health*. 1999, 23(2): 128-137.

D'Onofrio
continued from page 3

single approach. Overall, environmental and administrative interventions appear to be more effective than traditional educational methods and audits.

We may also be able to advance the use of screening and brief intervention by applying to physician behavior the very same principles of brief intervention that we use to change patient behavior. Despite solid evidence in favor of brief intervention, physicians continue to display ambivalence toward using it themselves. When we work with patients, we address ambivalence by offering feedback and discussing the pros and cons of behavior. Perhaps we should use this same strategy with our peers to increase their acceptance and practice of screening and brief intervention.

Research can help us develop and refine more effective and specific methods to make screening and brief intervention for alcohol problems a part of everyday practice. More than likely we will need a combination of methods to effectively change physician behavior, as well as a menu of options from which each specialty can choose. And in the end, brief intervention may turn out to benefit both the patient and the physician.

Perl
continued from page 5

Future Directions

Brief interventions with non-dependent but high-risk drinkers have been shown to have positive effects in reducing alcohol use and alcohol-related problems across a broad range of settings and with a wide cross-section of patients. Still, a great deal remains to be done in order to consolidate and expand our knowledge and understanding of this potentially far-reaching intervention strategy. For example, we must learn how to maintain and even strengthen the effects of brief interventions over time. One possible tactic, which is already under some examination, is to provide re-interventions at specified intervals. We will want to identify and isolate the active ingredients of these types of interventions — which may very well differ across various settings and patient populations — so that the brief window of intervention opportunity can be used most efficiently. Finally, we will need to develop ways to facilitate the integration of screening and brief interventions for alcohol use problems into the routine practices and procedures of our health care system.

References are available from the author at perl@nih.gov.

FRONTLINES
LINKING ALCOHOL SERVICES RESEARCH AND PRACTICE

FrontLines is published twice a year by the Academy for Health Services Research and Health Policy. For further information contact AHSRHP at 202/292-6700.